

WATER QUALITY MEMORANDUM

Utah Coal Regulatory Program

March 25, 2010

TO: Internal File

THRU Daron R. Haddock, Permit Supervisor *RCH*

FROM: James D. Smith, Environmental Scientist III *JS 03/25/10*

RE: 2009 Third Quarter Water Monitoring, PacifiCorp, Deer Creek Mine. C/015/0018, Recurring Task ID #3378

The Deer Creek Mine monitoring plan is described in Appendix A of Volume 9 of the MRP.

1. Were data submitted for all of the MRP required sites?

Streams	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>
UPDES	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>
In-mine	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>
Springs	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>

NEWUA Meter 2 was not accessible during the 3rd Quarter 2009.

Wells	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>
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2. Were all required parameters reported for each site? YES ☒ NO ☐

3. Were any irregularities found in the data?

Listed parameters were more than two standard deviations from the mean. An asterisk (*) indicates this is not a parameter specifically required by the MRP.

Streams

YES ☒ NO ☐

DCR04 August: flow;
DCR04 September: flow, Mg, and K;
DCR06 July and August: flow;
DCR06 September: flow and K.

UPDES

YES ☒ NO ☐

UT0023604-002 July: Na;
UT0023604-002 August: Na and field electrical conductivity;
UT0023604-002 September: K and field electrical conductivity.

In-mine

YES ☐ NO ☒

Springs

YES ☒ NO ☐

Burnt Tree July: Na
Sheba July: Na and field electrical conductivity;
79-10 July: lab pH*;
79-15: field electrical conductivity, Ca, Mg, Na, bicarbonate as CaCO₃, acidity*, total alkalinity, lab electric conductivity*, TDS, and total-anions*;
79-29 July: field electrical conductivity;
79-32: field electrical conductivity;
79-34: Mg, Na, bicarbonate as CaCO₃, Cl, and total alkalinity;
79-35 July: cation-anion percent difference;
79-38: Na and water temperature;
80-48: water temperature;
80-50: bicarbonate as CaCO₃;
89-68: water temperature and Ca;
JV-9: flow and acidity*;
MF-7: acidity*;
MF-10: Mg, bicarbonate as CaCO₃, total alkalinity, lab electric conductivity, cation-anion percent difference;
MF-19B: lab electric conductivity and TDS;
MF-213: total alkalinity;
MF-219: flow;
RR 5: Ca and total hardness;
RR 15: bicarbonate as CaCO₃;
RR 23A: bicarbonate as CaCO₃, acidity*, and total alkalinity;
SP1-29: total alkalinity;

UJV 101: lab electric conductivity and lab pH*;
EM POND: Ca, bicarbonate as CaCO₃, and total alkalinity;
GRANT SPRING: bicarbonate as CaCO₃, acidity*, and total alkalinity;
LITTLE BEAR: Ca and total hardness;
MINE SITE 4: Mg.

Wells

YES ☒ NO ☐

DCWR1: acidity*.

4. On what date does the MRP require a five-year resampling of baseline water data.

Baseline analyses were performed in 2001 and are to be repeated every 5 years; baseline analyses were done in 2006 and should be done again in 2011: this schedule applies to all the PacifiCorp mines, irrespective of the permit renewal date. For the Deer Creek Mine, renewal submittal is due 10/07/10, and renewal is due 02/07/11.

5. Based on your review, what further actions, if any, do you recommend?

Although there are a large number of parameters that exceeded the mean by more than two standard deviations, there is no indication of trends or extremes in any of the parameter values. No further action recommended at this time.

6. Does the Mine Operator need to submit more information to fulfill this quarter's monitoring requirements?

YES ☐ NO ☒

7. Follow-up from last quarter, if necessary.

None.

8. Did the Mine Operator submit all the missing and/or irregular data (datum)?

Yes.